# DC5 - DESIGN CRITERIA FOR STORM DRAINAGE FACILITIES

The City of Gardner design criteria shall conform to American Public Works Association (APWA) *Section 5600 – Storm Drainage Systems & Facilities*, latest edition, with the following amendments and modifications:

### **SECTION 5601 ADMINISTRATIVE**

### 5601.1 Introduction

This section shall be modified to include the following paragraph:

The City Engineer reserves the right to modify the criteria set forth in this Section in order to accommodate unique or innovative projects, such as low impact developments, conservation developments and redevelopment projects.

## 5601.3 General Requirements and Applicability

This section shall be modified to include the following paragraph:

All proposed projects shall submit a stormwater management system design in accordance with Section 14.01.400 of the Gardner Municipal Code.

A minimum of 2 percent grade is required for positive drainage for all lot-to-lot developments. Due to the relatively flat topography in the City of Gardner, inlets shall be placed in subdivisions per design as determined by the City Engineer. Runoff from adjacent upstream properties shall be directed into swales or inlets as directed by the City Engineer.

### **SECTION 5607 ENGINEERED CHANNELS**

<u>5607.2B-Roadside Channels</u> shall be modified to include the following statement:

Permanent easements for roadside drainage swales shall extend from the right-of-way to 10-feet beyond the outside bank of the swale.

The following sub-section shall be added to <u>Section 5607.2-Easements:</u>

**5607.2C** - Permanent easements shall be dedicated to the City of Gardner for operation and maintenance of swales that will be publicly maintained. The minimum width of permanent easements for overflow swales shall be the calculated 100-year flow width, with a minimum width of ten feet (10').

#### SECTION 5608 STORMWATER DETENTION AND RETENTION

<u>5608.4C – Release Rates</u> – This subsection shall be replaced with the following:

Table 5608.4-1 - Allowable Release Rates from Detention Facilities

Design	Allowable Post Development
Storm	Release Rate
1-Year	Pre-developed 1-year storm
10-Year	Pre-developed 10-year storm
100-Year	Pre-developed 100-year storm

Stormwater detention requirements may be waived for infill sites if approved by the City Engineer. Prior to approval of a waiver, a Stormwater Management Plan shall be submitted and approved by the City Engineer.

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